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### **RAW SEQUENCE LISTING** PATENT APPLICATION US/09/574,735B

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This Raw Listing contains the General Information Section and up to the first 5 pages.

```
SEQUENCE LISTING
 1
 2
 3
     (1)
            General Information:
                                           Ceriani, Roberto L.
 5
     (i) APPLICANT:
 6
         Peterson, Jerry A.
 7
         Larocca, David J.
 8
     (ii) TITLE OF THE INVENTION:
                                        FUSION PROTEIN WITH 46 KDALTON
 9
     KIT & METHODS
10
11
     (iii)
             NUMBER OF SEQUENCES:
12
13
14
     (iv)
             CORRESPONDENCE ADDRESS:
15
     (A) ADDRESSEE:
                      Ratner & Prestia
     (B) STREET:
                               Suite 301
16
17
     One Westlakes, Berwyn
     (C) CITY:
18
                               Valley Forge
19
     (D) STATE:
                               Pennsylvania
20
     (E) COUNTRY:
                               USA
21
     (F) ZIP:
                               19482
22
             COMPUTER READABLE FORM:
23
     (v)
     (A) MEDIUM TYPE:
                               Floppy disk 3.5"
24
25
     (B) COMPUTER:
                               IBM PC compatible
     (C) OPERATING SYSTEM:
                               PC-DOS/MS-DOS 5.0
26
27
     (D) SOFTWARE:
                               PatentIn #1.0,
28
     Version #1.25
29
30
             CURRENT APPLICATION DATA:
31
     (A) APPLICATION NUMBER: 08/482,596
                               June 7, 1995
     (B) FILING DATE:
32
     (C) CLASSIFICATION:
33
34
     (viii) ATTORNEY/AGENT INFORMATION:
35
     (A) NAME:
36
                               Amzel, Viviana
37
     (B) REGISTRATION No.:
                               30,930
38
     (C) REFERENCE/DOCKET No.:CRFC-046
39
40
             TELECOMMUNICATION INFORMATION:
     (ix)
     (A) TELEPHONE: (610) 407-0700
41
                               (610) 407-0701
42
     (B) TELEFAX:
43
     (C) TELEX:
44
45
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### RAW SEQUENCE LISTING PATENT APPLICATION US/09/574,735B

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```
47
    (2) INFORMATION FOR SEQ ID NO:1:
48
         (i) SEQUENCE CHARACTERISTICS:
49
     (A) LENGTH:
                 1384 base pairs
50
     (B) TYPE:
                           nucleic acid
51
                           both
     (C) STRANDEDNESS:
52
     (D) TOPOLOGY:
                            linear
53
54
    (ii) MOLECULE TYPE: DNA
55
56
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
57
58
    GATTTCATCC ATGATGTTAA TAAAAAACAC AAGGAGTTTG TGGGTAACTG
59
    GAACAAAAC GCGGTGCATG TCAACCTGTT TGAGACCCCT GTGGAGGCTC
                                                            100
60
    AGTACGTGAG ATTGTACCCC ACGAGCTGCC ACACGGCCTG CACTCTGCGC 150
61
    TTTGAGCTAC TGGGCTGTGA GCTGAACGGA TGCGCCAATC CCCTGGGCCT
                                                            200
62
    GAAGAATAAC AGCATCCCTG ACAAGCAGAT CACGGCCTCC AGCAGCTACA 250
63
    AGACCTGGGG CTTGCATCTC TTCAGCTGGA ACCCCTCCTA TGCACGGCTG 300
    GACAAGCAGG GCAACTTCAA CGCCTGGGTT GCGGGGAGCT ACGGTAACGA 350
    TCAGTGGCTG CAGGTGGACC TGGGCTCCTC GAAGGAGGTG ACAGGCATCA
66
    TCACCCAGGG GGCCCGTAAC TTTGGCTCTG TCCAGTTTGT GGCATCCTAC
67
    AAGGTTGCCT ACAGTAATGA CAGTGCGAAC TGGACTGAGT ACCAGGACCC 500
68
    CAGGACTGGC AGCAGTAAGA TCTTCCCTGG CAACTGGGAC AACCACTCCC 550
69
    ACAAGAAGAA CTTGTTTGAG ACGCCCATCC TGGCTCGCTA TGTGCGCATC 600
70
71
    CTGCCTGTAG CCTGCACAA CCGCATCGCC CTGCGCCTGG AGCTGCTGGG 650
    CTGTTAGTGG CCACCTGCCA CCCCCAGGTC TTCCTGCTTT CCATGGGCCC
72
                                                           700
    GCTGCCTCTT GGCTTCTCAG CCCCTTTAAA TCACCATAGG GCTGGGGACT
73
                                                            750
    GGGGAAGGG AGGGTGTTCA GAGGCAGCAC CACCACAG TCACCCCTCC 800
    CTCCCTCTTT CCCACCCTCC ACCTCTCACG GGCCCTGCCC CAGCCCCTAA 850
    GCCCCGTCCC CTAACCCCCA GTCCTCACTG TCCTGTTTTC TTAGGCACTG
                                                            900
    AGGGATCTGA GTAGGTCTGG GATGGACAGG AAAGGGCAAA GTAGGGCGTG
    TGGTTTCCCT GCCCTGTCC GGACCGCCGA TCCCAGGTGC GTGTGTCTCT 1000
78
    GTCTCTCCTA GCCCCTCTCT CACACATCAC ATTCCCATGG TGGCCTCAAG 1050
79
80
    AAAGGCCCGG AAGCCCCAGG CTGGAGATAA CAGCCTCTTG CCCGTCGGCC 1100
    CTGCGTCGGC CCTGGGGTAC CATGTGCCAC AACTGCTGTG GCCCCCTGTC 1150
81
    CCCAAGACAC TTCCCCTTGT CTCCCTGGTT GCCTCTTTG CCCCTTGTCC 1200
82
    TGAAGCCCAG CGACACAGAA GGGGGTGGGG CGGGTCTATG GGGAGAAAGG 1250
83
    GAGCGAGGTC AGAGGAGGGC ATGGGTTGGC AGGGTGGGCG TTTGGGGCCC 1300
84
    TCATGCTGGC TTTTCACCCC AGAGGACACA GGCAGCTTCC AAAATATATT 1350
    TATCTTCTTC ACGGGAAAAA AAAAAAAAA ACCG
                                                                   1384
87
88
89
   (2) INFORMATION FOR SEQ ID NO:2:
90
91
        (i) SEQUENCE CHARACTERISTICS:
92
    (A) LENGTH: 218 amino acids
93
    (B) TYPE:
94
                            amino acid
95
    (C) STRANDEDNESS:
96
    (D) TOPOLOGY:
                            linear
97
        (ii) MOLECULE TYPE: protein
98
99
```



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(v) FRAGMENT TYPE:
100
101
102
          (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:
103
104
      Asp Phe Ile His Asp Val Asn Lys Lys His Lys Glu Phe Val
105
106
      Gly Asn Trp Asn Lys Asn Ala Val His Val Asn Leu Phe Glu
107
108
                           20
109
      Thr Pro Val Glu Ala Gln Tyr Val Arg Leu Tyr Pro Thr Ser
110
                               35
      Cys His Thr Ala Cys Thr Leu Arg Phe Glu Leu Leu Gly Cys
111
112
                          50
      Glu Leu Asn Gly Cys Ala Asn Pro Leu Gly Leu Lys Asn Asn
113
114
                               65
      Ser Ile Pro Asp Lys Gln Ile Thr Ala Ser Ser Ser Tyr Lys
115
116
      Thr Trp Gly Leu His Leu Phe Ser Trp Asn Pro Ser Tyr Ala
117
118
                           90
     Arg Leu Asp Lys Gln Gly Asn Phe Asn Ala Trp Val Ala Gly
119
120
                              105
     Ser Tyr Gly Asn Asp Gln Trp Leu Gln Val Asp Leu Gly Ser
121
122
                          120
     Ser Lys Glu Val Thr Gly Ile Ile Thr Gln Gly Ala Arg Asn
123
124
                              135
     Phe Gly Ser Val Gln Phe Val Ala Ser Tyr Lys Val Ala Tyr
125
126
                          150
     Ser Asn Asp Ser Ala Asn Trp Thr Glu Tyr Gln Asp Pro Arg
127
128
                          160
129
     Thr Gly Ser Ser Lys Ile Phe Pro Gly Asn Trp Asp Asn His
130
         170
                              175
     Ser His Lys Lys Asn Leu Phe Glu Thr Pro Ile Leu Ala Arg
131
                          190
132
                                              195
     Tyr Val Arg Ile Leu Pro Val Ala Trp His Asn Arg Ile Ala
133
         200
134
                              205
135
     Leu Arg Leu Glu Leu Leu Gly Cys
136
     215
137
138
139
      (2) INFORMATION FOR SEQ ID NO:3:
140
141
           (i) SEQUENCE CHARACTERISTICS:
142
      (A) LENGTH:
                              217
143
      (B) TYPE:
144
                              amino acid
      (C) STRANDEDNESS:
145
      (D) TOPOLOGY:
                              linear
146
147
          (ii) MOLECULE TYPE: protein
148
149
150
          (v) FRAGMENT TYPE:
151
           (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:
152
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```
153
     Phe Ile His Asp Val Asn Lys Lys His Lys Glu Phe Val Gly
154
155
     Asn Trp Asn Lys Asn Ala Val His Val Asn Leu Phe Glu Thr
156
157
                           20
     Pro Val Glu Ala Gln Tyr Val Arg Leu Tyr Pro Thr Ser Cys
158
                               35
159
     His Thr Ala Cys Thr Leu Arg Phe Glu Leu Leu Gly Cys Glu
160
161
                           50
     Leu Asn Gly Cys Ala Asn Pro Leu Gly Leu Lys Asn Asn Ser
162
163
164
     Ile Pro Asp Lys Gln Ile Thr Ala Ser Ser Ser Tyr Lys Thr
165
166
                           80
     Trp Gly Leu His Leu Phe Ser Trp Asn Pro Ser Tyr Ala Arg
167
168
                           90
     Leu Asp Lys Gln Gly Asn Phe Asn Ala Trp Val Ala Gly Ser
169
170
171
     Tyr Gly Asn Asp Gln Trp Leu Gln Val Asp Leu Gly Ser Ser
172
                          120
     Lys Glu Val Thr Gly Ile Ile Thr Gln Gly Ala Arg Asn Phe
173
174
        130
                             135
     Gly Ser Val Gln Phe Val Ala Ser Tyr Lys Val Ala Tyr Ser
175
                          150
176
     Asn Asp Ser Ala Asn Trp Thr Glu Tyr Gln Asp Pro Arg Thr
177
178
                          160
179
     Gly Ser Ser Lys Ile Phe Pro Gly Asn Trp Asp Asn His Ser
180
                             175
181 His Lys Lys Asn Leu Phe Glu Thr Pro Ile Leu Ala Arg Tyr
182
                         190
     Val Arg Ile Leu Pro Val Ala Trp His Asn Arg Ile Ala Leu
183
        200
184
                             205
     Arg Leu Glu Leu Leu Gly Cys
185
186
     215
             217
187
188
189
     (2) INFORMATION FOR SEQ ID NO:4:
190
191
          (i) SEQUENCE CHARACTERISTICS:
192
      (A) LENGTH:
                            218 amino acids
193
     (B) TYPE:
                             amino acid
194
      (C) STRANDEDNESS:
195
196
      (D) TOPOLOGY:
                             linear
197
      (ii) MOLECULE TYPE: protein
198
199
      (v) FRAGMENT TYPE:
200
201
      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:
202
203
204
     Phe Lys Gly Asn Ser Thr Arg Asn Val Met Tyr Phe Asn Gly
205
                       5
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### RAW SEQUENCE LISTING PATENT APPLICATION US/09/574,735B

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```
206
     Asn Ser Asp Ala Ser Thr Ile Lys Glu Asn Gln Phe Asp Pro
207
                           20
                                               25
      Pro Ile Val Ala Arg Tyr Ile Arg Ile Ser Pro Thr Arg Ala
208
209
          30
                               35
      Tyr Asn Arg Pro Thr Leu Arg Leu Glu Leu Gln Gly Cys Glu
210
211
                          50
      Val Asn Gly Cys Ser Thr Pro Leu Gly Met Glu Asn Gly Lys
212
213
      Ile Glu Asn Lys Gln Ile Thr Ala Ser Ser Phe Lys Lys Ser
214
215
                           80
      Trp Trp Gly Asp Tyr Trp Glu Pro Phe Arg Ala Arg Leu Asn
216
                          90
217
     Ala Gln Gly Arg Val Asn Ala Trp Gln Ala Lys Ala Asn Asn
218
219
                             105
                                             110
         100
     Asn Lys Gln Trp Leu Glu Ile Asp Leu Leu Lys Ile Lys Lys
220
221
                          120
                                             125
      Ile Thr Ala Ile Ile Thr Gln Gly Cys Lys Ser Leu Ser Ser
222
223
                             135
                                          · 140
     Glu Met Tyr Val Lys Ser Tyr Thr Ile His Tyr Ser Glu Gln
224
225
                          150
     Gly Val Glu Trp Lys Pro Tyr Arg Leu Lys Ser Ser Met Val
226
                         160
227
     Asp Lys Ile Phe Glu Gly Asn Thr Asn Thr Lys Gly His Val
228
229
                            175
        170
230
     Lys Asn Phe Phe Asn Pro Pro Ile Ile Ser Arg Phe Ile Arg
                         190
231
                                              195
232
     Val Ile Pro Lys Thr Trp Asn Gln Ser Ile Ala Leu Arg Leu
233
                             205
234
     Glu Leu Phe Gly Cys Asp Ile Tyr
235
                 218
236
237
238
      (2) INFORMATION FOR SEQ ID NO:5:
239
240
          (i) SEQUENCE CHARACTERISTICS:
241
      (A) LENGTH:
242
                            218
      (B) TYPE:
                             amino acid
243
      (C) STRANDEDNESS:
244
245
      (D) TOPOLOGY: linear
246
      (ii) MOLECULE TYPE: protein
247
248
249
      (v) FRAGMENT TYPE:
250
      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:
251
252
     Tyr Arg Gly Asn Ser Thr Gly Thr Leu Met Val Phe Phe Gly
253
254
                       5
     Asn Val Asp Ser Ser Gly Ile Lys His Asn Ile Phe Asn Pro
255
256
                          20
     Pro Ile Ile Ala Arg Tyr Ile Arg Leu His Pro Thr His Tyr
257
258
```

# SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/09/574,735B

DATE: 09/26/2001 TIME: 23:02:39

INPUT SET: S36631.raw

Line

Error

Original Text

31

Wrong application Serial Number

(A) APPLICATION NUMBER: 08/482,596

# SEQUENCE MISSING ITEM REPORT PATENT APPLICATION US/09/574,735B

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APPLICATION NUMBER FILING DATE PRIOR APPLICATION DATA

# SEQUENCE CORRECTION REPORT PATENT APPLICATION US/09/574,735B

DATE: 09/26/2001 TIME: 23:02:39

Line	Original Text	Corrected Text
9 37 38	(ii) TITLE OF THE INVENTION: FUSION PROTE (B) REGISTRATION No.: 30,930 (C) REFERENCE/DOCKET No.:CRFC-046	(ii) TITLE OF INVENTION: FUSION PROTEIN W (B) REGISTRATION NUMBER: 30,930 (C) REFERENCE/DOCKET NUMBER: CRFC-046

# SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/09/574,735B

DATE: 09/26/2001 TIME: 23:02:39

INPUT SET: S36631.raw

Line

Error

Original Text

31

Wrong application Serial Number

(A) APPLICATION NUMBER: 08/482,596

# SEQUENCE MISSING ITEM REPORT PATENT APPLICATION US/09/574,735B

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INPUT SET: S36631.raw

APPLICATION NUMBER FILING DATE PRIOR APPLICATION DATA

# SEQUENCE CORRECTION REPORT PATENT APPLICATION US/09/574,735B

DATE: 09/26/2001 TIME: 23:02:39

Line	Original Text	Corrected Text
9 37 38	(ii) TITLE OF THE INVENTION: FUSION PROTE (B) REGISTRATION No.: 30,930 (C) REFERENCE/DOCKET No.:CRFC-046	(ii) TITLE OF INVENTION: FUSION PROTEIN W (B) REGISTRATION NUMBER: 30,930 (C) REFERENCE/DOCKET NUMBER: CRFC-046